

REMARKS

Claims 1-10 have been amended to clarify the preamble and to remove “means-plus-function” language. Further, claim 1 has been amended to clarify that the at least one force sensor is carried by the intervention device and to replace “in accordance with” with “based on”. Basis for these amendments can be understood from an appreciation of the text at page 9 and Figures 2a and 2b, and the paragraph bridging pages 12 and 13.

Claims 6 and 8 have been further amended to clarify the usage of the at least one force sensor.

New claims 37 and 39 have been added to clarify that the at least one force sensor or plurality of force sensors is/are embedded in the intervention device. Basis for this amendment may be found from the text at page 9.

A new claim 38 has been added to claim a specific feature, which has basis throughout the description, such as the first paragraph of page 22, and the first and second paragraphs of page 15.

Applicant submits that no new matter has been added.

Priority/Oath & Declaration/Specification

This application is a 371 of PCT/SG2005/000063, which claims priority under 35 U.S.C. § 119(a) to a Singapore application filed on March 4, 2004. All requirements for the claim for priority have been met, and there is no requirement that the foreign priority be referenced in the specification of the present application. See MPEP § 201.13(b).

The inventors declaration (copy attached) was properly filed during the international stage and properly references the international application number. It is not defective. See MPEP § 1893.01(e).

In U.S. national stage applications, there is no requirement that the abstract be provided on a separate page by the applicant. However, a copy of the abstract on a separate page is submitted herewith.

Claim Objections

The preambles of the claims have been amended and Applicant submits that objections under this heading are rendered moot.

Claim Rejections - 35 U.S.C. §112

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant submits that these rejections are rendered moot in view of the following amendments.

Claim 1 has been clarified as "...to calculate the applied force based on the remote force..." and Applicant submits that this would address the Examiner's concern.

Claims 2 to 4 and 10 have been amended to address the antecedent objections and thus, Applicant submits that these objections are rendered moot.

Claim 5 has been amended to remove the "means-plus-function" language.

Claim Rejections - 35 U.S.C. §102

Claims 1-4 and 6-10 are rejected under 35 USC 102 as being anticipated by US 6,096,004 to Meglan et. al. ("Meglan").

First point of novelty

The Examiner referred to elements 114,116 of 50 to assert that Meglan discloses at least one sensor arranged to sense a remote force on the intervention device. It would be appropriate to point out that, as explained at column 6 line 48 of Meglan, 114 and 116 refer to motor/sensor assemblies which are separate from and not carried by the tools 10",12",14".

In contrast, claim 1 of the present application includes the limitation that the intervention device carries at least one force sensor arranged to sense a remote force acting on the intervention device, and thus, Applicant submits that this represents a first point of novelty over Meglan.

Second point of novelty

Further, the Examiner referred to elements 120,122,124,126,140 in Meglan to assert that Meglan discloses the force application means comprises a resilient member arranged to apply the said force to the intervention device.

The Examiner would appreciate from column 7 lines 29 to 50 that 120 refers to the three-sided carriage body, 122 is a drive pinch wheel, 124 is a clamp member, 126 are posts which support the clamp member 124, and 140 is an idle pinch wheel 140 mounted on the clamp member 124. However, there is no disclosure that any of these elements are "resilient" members. Indeed, there is no disclosure or suggestion of the material of these elements 120,122,124,126,140.

It is noted that lines 59 to 62 of column 7 discloses a pair of springs preferably disposed on each post 126, one between the body 120 and the clamp member 124, and one between the clamp member 124 and a retaining nut threaded onto the post 126. However, even if the pair of springs may be considered to be "resilient" which Applicant submits not, the springs are for supporting the posts 126 and are clearly not arranged to apply a force on the controls 10',12',14' or the tools 10",12",14".

In contrast, claim 1 of the present application includes the limitation that the force applicator comprises a resilient member arranged to apply the said force to the intervention device, and thus, Applicant submits that this represents a second point of novelty over Meglan.

Third point of novelty

The Examiner also referred to 114,116 of 50 to assert that Meglan discloses a sensor arranged to detect frictional force between the resilient member and the intervention device.

As explained at column 6 line 48 of Meglan, 114 and 116 refer to motor/sensor assemblies. As explained at lines 53 to 60 of that column, Meglan discloses that the sensor within each assembly 114,116 senses the rotational position of the corresponding co-located motor. Likewise, at column 7 lines 9 to 11, Meglan teaches that the rotation of the wheels 102,104 is detected by the encoders within the assemblies 114,116. Thus, there is no disclosure in Meglan of a sensor in the assemblies 114,116 which is arranged to detect frictional force, much less one which detects frictional force between a resilient member and an intervention device.

In contrast, unlike what is disclosed in Meglan, claim 1 includes the limitation of a sensor arranged to detect frictional force between the resilient member and the intervention device. These represent further points of novelty over Meglan.

In view of the above, Applicant submits that Meglan does not recite each and every element of claim 1, whether expressly or inherently, and thus claim 1 possesses novelty.

The rest of the claims are dependent directly or indirectly from claim 1 and thus, are patentable at least for this reason. Nonetheless, with regard to new claim 38, it would be appreciated that there is no disclosure or suggestion in Meglan of having a plurality of sensors which are arranged to detect a shape of the intervention device. Further, with regard to claims 37 and 39, it can also be appreciated that there is no disclosure or suggestion in Meglan of at least one sensor or a

plurality of sensors being embedded in the intervention device. Thus, Applicant submits that claims 37 to 39 are also patentable for this reason.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance and believe that they have done so. Applicant has pointed out significant and substantial shortcomings of the documents relied upon by the Examiner with respect to the pending claims. Applicant has further discussed the explicitly recited features of Applicant's claims and have noted the shortcomings of the relied upon documents with respect thereto. Accordingly, Applicant has provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully request a prompt passage to issuance.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number set out below.

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Respectfully submitted,

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